



# POLYVAN<sup>®</sup>-31

NATURALLY SOUND ABSORBING



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POLYVAN<sup>®</sup>-31 was especially developed for the railway industry and vehicle construction. The basic version of this sandwich element consists of two birch plywood panels around a special cork inlay. Both the thickness and wood type of the plywood board and the thickness of the cork mat are variable.

Outstanding sound absorption and thermal insulation values along with extreme weight savings of up to 40% in comparison to regular floor coverings (e.g. with sound damping mat or salt impregnation) characterize this special plywood. It can be disposed in an ecologically-friendly manner, since it's made from natural regenerable materials: wood and cork.

### ADVANTAGES

- low life-cycle costs: extremely durable with high product safety
- proven for decades
- multi-purpose use (insulation and construction of floors or partition walls)
- sound insulation value  $R_w$  approx. 31 dB
- vibration reducing, resulting a pleasant foothold
- acoustically effective cork inlay absorbs oscillation energy
- manufactured in accordance with DIN 6701-2, the used plywood is EN 314-2, class 3 and DIN 68705, part 3, BFU 100 glued
- fire behaviour tested according to EN 45 545-2 and DIN 5510-2







## CONSTRUCTIVE VARIATIONS

- the use of fire resistant plywood (e.g. JELMO®) can reduce the flammability considerably.
- the use of FSC/PEFC certified plywood allows for an ecologically sustainable BARY VAM® variant
- use of rubber cork with increased sound requirements
- individual special constructions with plywood inlays and several cork layers in thicknesses of 3 - 10 mm
- for use in tropical conditions (extreme humidity, termite danger) made of plywood with increased resistance to EN 350-2
- assembly-ready and ready-to-install machining according to the customers drawing including the necessary add-on parts
- surface coating e.g. with special paint, fire-resistant paint, aluminum sheet, HPL/CPL, phenolic resin, aquastop, floor covering, heating layer



For customer-side processing, we refer explicitly to our recommendation for handling and processing.

This brochure as well as detailed technical data sheets can be found in the download area of our homepage at [www.rudolf-rost.de](http://www.rudolf-rost.de).



Mobility  
Networks  
Logistics

We are certified in accordance with EN ISO 9001 and Q1 supplier of Deutsche Bahn AG.

We have the adhesive approval according to DIN 6701-2.



# REFERENCES

## For railway industry

Alstom

Bombardier Transportation

Deutsche Bahn

Schweizerische Bundesbahnen

Siemens



*urban trains*



*mega yachts*

## For yacht- and shipbuilding

Blohm & Voss

Feadship

Fincantieri

Meyer Werft

Nobiskrug Werft

STX



*coaches*



*urban trains*



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